

A complete listing of all claims in this application is set forth below.

In the Claims

Please amend claims 1-18 as set forth below.

(Currently amended) 1. A solid ink supply container adapted for use with solid ink printers, said container component comprising:

~~a removable housing for installing within a solid ink printer, adapted to receive a solid ink masses block being stored within said housing, said housing being adapted to be coupled to at least one printhead;~~

~~a heater subsumed by within said housing, said heater adapted to for liquefying said solid ink masses block within said housing;~~

~~an outlet port adapted to facilitate fluid-ink transfer of said liquefied ink to the at least one printhead coupled to the housing;~~

~~an ink sensor adapted to sense the for determining an amount of ink in said supply container housing;~~

~~at least one electronic storage device attached to within said housing, said electronic storage device being coupled to a container bus within said housing adapted to exchange receive printer operation information with the from a printer controller for the printer in which the housing is installed to which said ink supply container is attached; and~~

~~electrical contacts coupled to said container bus attached to within said housing; said electrical contacts for coupling the printer controller to the container bus so that the printer controller is enabled to send printer operation information to said electronic storage device in adapted to exchange power and information-~~

~~between said printer, and exchange power and information between said storage device and other components of said housing.~~

(Currently amended) 2. A method of ~~replacing~~ storing and melting solid ink for a solid ink printer, said method comprising:

~~providing at least one solid ink supply container comprising:-~~

coupling a removable housing adapted to receive in which a solid ink masses block is stored, ~~said housing adapted to be coupled to at least one printhead;~~

~~a heater subsumed by said housing, said heater adapted to liquefying with a heater the solid ink block within the housing masses;~~

transferring the liquefied ink to the printhead through a fluid outlet port attached to said housing, said port adapted to output liquefied ink to said at least one printhead; and

receiving printer operation information from a printer controller external to the housing and storing the printer operation information in an electronic storage device within attached to said housing, said electronic storage device adapted to store printer operation information transferred to it by a printer to which said ink supply container is attached; and

~~electrical contacts attached to said housing; said electrical contacts adapted to exchange power and information between said printer, and exchange power and information between said storage device and other components of said housing;~~

~~removing said container from said printer when container ink is depleted;~~
~~recycling said container at a recycling operation;~~
~~receiving a replacement container from said recycling operation with new~~
~~solid ink therein; and~~
~~installing said replacement container for use with said printer.~~

(Currently amended) 3. A system for supplying solid ink to a solid ink printer comprising:

a solid ink supply container adapted for use with solid ink printers,
said container comprising:
a ~~removable~~ housing for installation in a solid ink printer, adapted to
~~receive a~~ solid ink block being stored within the housing masses, said housing
~~adapted to be~~ being coupled to at least one printhead;
a heater ~~subsumed by~~ within said housing, said heater adapted to
liquefy within the housing the solid ink block masses;
a fluid outlet port ~~attached to~~ through a wall of said housing, ~~said port~~
~~adapted to output liquefied~~ the liquefied ink being transported through the fluid
outlet port to said at least one printhead;
an electronic storage device ~~attached to~~ within said housing, said
electronic storage device ~~adapted to store~~ for storing printer operation
information transferred to it by a printer controller external to which said ink
supply container is attached; and

electrical contacts attached to said housing; said electrical contacts for coupling said electronic storage device to said printer controller to receive ~~adapted to exchange power and printer operation information between from~~ said printer controller, ~~and exchange power and information between said storage device and other components of said housing; and.~~

(Currently amended) 4. The method of Claim 2, further comprising:

removing the housing from the printhead; and
downloading printer operation information ~~from~~ stored in said electronic storage device within the container by an instrumentality of said recycling operation.

(Currently amended) 5. The method of Claim 2, further comprising:

automatically detecting ~~[[the]]~~ a low level of ink in said housing; and
generating a low ink level signal by said container and transmitting the low level signal to said printer controller over a container bus, ~~a low ink level signal when the ink level reaches a predefined level.~~

(Currently amended) 6. The method of Claim 2, further comprising:

automatically detecting ~~[[the]]~~ a low level of ink in said housing;
generating a low ink level signal by said container and transmitting the low level signal to said printer controller over a container bus, ~~a low ink level signal when the ink level reaches a predefined low level; and~~

generating ~~by said printer~~, a user perceivable indication that ink in said container has reached a ~~predefined~~ low level.

(Currently amended) 7. The method of Claim 2, further comprising:

providing a plurality of solid ink supply containers;

coupling one solid ink supply container in the plurality of ink supply containers to a printhead to provide liquid ink from the ink supply container;

automatically detecting ~~[[the]]~~ a low level of ink in the one solid ink supply container coupled to the printhead ~~the housings;~~

automatically switching ~~the supply of ink from the one solid ink supply container~~ to another one of the solid ink supply containers in the plurality in response to detection of a low ink level in the solid ink supply container coupled to the printhead ~~when the ink level in that container reaches a predetermined threshold level, to another ink supply container.~~

(Currently amended) 8. The method of Claim 7 ~~2~~, ~~wherein said printer operation information comprises color table information~~ further comprising:

applying pressure with a spring-biased ram to the solid ink block to move a portion of the solid ink block into contact with the heater for liquefying the solid ink block.

(Currently amended) 9. The method of Claim 8 ~~2~~, wherein said printer operation information comprises thermal operation set point information the low ink level detection further comprising:

coupling a rheostat to the spring-biased ram; and
detecting the low ink level with the rheostat.

(Currently amended) 10. The supply container of Claim 1, wherein said fluid output port further comprises:

a fluid outlet valve through which adapted to output liquefied ink is supplied to said at least one printhead.

(Currently amended) 11. The supply container of Claim 1, wherein said ink sensor further comprises:

a rheostat spring-biased ram for applying pressure to the solid ink mass to move a portion of the solid ink block to the heater for melting.

(Currently amended) 12. The supply container of Claim 11 ~~4~~, wherein said printer operation information comprises color table information further comprising:

a rheostat coupled to the spring-biased ram, the rheostat being used to detect a low ink level in the container.

(Currently amended) 13. The supply container of Claim 12 ~~1~~, wherein said ~~printer operation information comprises thermal operation set point information~~
further comprising:

a filter for filtering the liquefied ink before the liquefied ink is
transported from the container through the outlet port.

(Currently amended) 14. The system of Claim 3, wherein said supply container
further comprises:

~~an ink level sensor coupled to said electrical contacts, said ink level~~
~~sensor adapted to detect the level of ink in said housing~~ a spring-biased ram for
urging said solid ink block to the heater so that the heater melts a portion of the
ink block contacting the heater.

(Currently amended) 15. The system of Claim 14 ~~3~~, wherein said supply
container further ~~comprises~~ comprising:

~~an ink level sensor coupled to said electrical contacts~~ a rheostat coupled
to the spring-biased ram, said ink level sensor rheostat adapted to detecting
[[the]] a level of ink in said housing;

~~wherein said ink level sensor comprises a rheostat.~~

(Currently amended) 16. The system of Claim 3 further comprising:

a plurality of solid ink supply containers, at least one of the solid ink supply containers in the plurality being coupled to a printhead; and further comprising:

an ink supply switch adapted to automatically switch the supply of ink from the one solid ink supply container coupled to the printhead to another solid ink supply container in the plurality in response to a low ink level being detected when the ink level in that container reaches a predetermined threshold level, to another ink supply container.

(Currently amended) 17. The system of Claim 15 3, wherein said printer operation information comprises color table information the container further comprising:

a filter for filtering the liquid ink before transferring the liquid ink to the printhead through the outlet port.

(Currently amended) 18. The system of Claim 17 3, wherein said printer operation information comprises thermal operation set point information the container further comprising:

a replaceable top for providing access to the container for replacement of the solid ink block.